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Slips Of Speech

Slips of the tongue, spoonerisms, and freudian slips are the
alteration of speech in an intelligent but usually unintentional
manner.[4,7] Speech, the verbalization of our thoughts,[1] is
assembled much like a modern home, in that, as we speak, we take
a basic plan and modify it to suit our needs and wishes. Our
words, key phrases, and complete statement are analogous to the
building blocks, basic plan, and the finished structure. An
example of a key phrase might be "this is the way we build our
house," which can easily be modified to say "in this way, we
build our sentence..." Slips of speech primarily involve the
building blocks of the sentence: the words. A slip of speech is
not an impediment, but a word-choice miscalculation. The way in
which a word is chosen (right or wrong) is of interest to both
psychologists and computer engineers, because thought processes
are involved. Slips of speech offer not only a look at these
processes, but also entertainment. I think it is safe to say
that we all have witnessed these often funny and embarrassing
verbal blunders, but in order to reinforce the idea, I have
included a list of examples in Appendix A.

As I approached the subject of slips of speech, I found
myself asking two questions. First, what are the causes of these
slips? Second, what use, if any, can we make of these twists of
language? I shall attempt to provide answers to both of these
questions.

Before we survey the causes of slips of speech, we must examine the mental processes that produce the spoken message. Articulation is beyond the scope of this paper, therefore, I will discuss speech from the message-production standpoint. Please keep in mind that the following are theories, and I have used only that material which I have found to be common among my references.

The skills of speech are learned, and thus used without conscious effort, in spite of the importance society places on what we say and how we say it. Our speech relies heavily on our memories.

The portion of our memories that pertains to speech uses symbols to identify things, thoughts, or concepts.[1] Basically, we can think of a symbol as the mind's crystallization of a word, as to the denotation (dictionary definition), connotation (emotional value), context (meaning as used), and usage (social definition) of that word. As we speak, our minds are continually and spontaneously associating names (or thoughts) with symbols in our memory. Symbols can be Accidental or Universal. The need for two types of symbols arises from the fact that words may have more than one meaning, depending on the context in which they are to be used. For example, a "speaker" could be the person speaking into a microphone, or the piece of equipment from which the amplified voice emanates. This is an example of an Accidental symbol, one which we make by association in the given context. In contrast, we associate the flag "Old Glory" with the United States. This is an example of a Universal symbol.[1] Conceivably, the term "sex symbol" was derived from this concept.

Symbols are encoded for storage in memory and decoded for speech processing, in a manner similar to that of a computer. This process generally takes place on a subconscious level. The entity responsible for encoding and decoding memory is called the "Perceptual Coder" (PC). During the encoding process, the PC organizes the symbols into subsets of relative terms, called "cognitive categories." There are three types of cognitive categories. They are as follows: superordinate, for example, "animal;" basic, for example, "dog;" and subordinate, for example, "Collie." Once we have determined the cognitive category for each symbol, we may then organize them by more specific categories called "memory categories." Memory categories include: Identity, Class, Attributes, Context, Function, Sensory Associations, Clangs and Visual Patterns, and Reproductive Information.[5] After the organization process is completed, the symbols are stored in areas of memory called "memory units." In order to be accessed without confusion, each memory unit is assigned a unique "address." These addresses are stored within a listing of memory units, called "traces," which can be thought of as the "card catalog" of memory. Traces act as memory pointers. They instruct the PC as to which memory unit (or file in our card catalog analogy) to access for each particular store (encode) or recall (decode). The Traces that are used most recently will be stonger than the other traces. The stronger the trace is, the more easily and quickly it can be accessed by the PC. During the decoding process, we make split-second decisions on what we want to say. The PC looks up each needed trace and goes to the appropriate memory units to

retrieve the needed information. Within the memory units, groups of words may be stored (via symbols) with a single word designated as the cue for the entire group. Recall this word and the others come along, too. This is called "Horizontal cueing." When we try to recall something, we may examine as many as five (plus or minus two, typically) memory units at one time. Examinations of this type are accomplished by using our "short term memories" as scratch pads, and are normally performed without interfering with our conscious thought processes. The problem arises when the subconscious stream of thought interferes with the conscious thought, by accidentally tainting the memory-recall cycle, during sentence contruction.[3,5,6,7,11]

Specifically, the interference is introduced while words are being selected for use in key phrases. When we speak, we use key phrases that we have learned by hearing them used or developing them ourselves, in order to construct new sentences. Phrases within a context are recalled and modified in order to say what we wish to say. When we are constructing or adapting a phrase for use in a certain context or concept, we recall from our memories a list of possible word choices that suit. We use this list as we would a Thesaurus, as a source of relative words. All of the words in this list have about the same probability of being chosen, because the words are all related in some way, but we will choose the one we reason to be the most definitive.[7,9,10] However, if we are thinking about something else at the same time (via our subconscious) and recognize a word in the list as applicable to this secondary thought, we may bias our decision to this word even though it doesn't fit properly into the initial

context. During phrase construction, we may even build the
phrase or sentence to say what the secondary thought would like
to express, using the word components of the initial thought to
do so. The stronger the secondary notion is, the more likely
this may occur. Normally, we have very little conscious control
over this split-second process, in fact, we may even select and
combine two similar-meaning or similar-sounding words to form
another word, such as combining "meat" and "beef" to form "meef."
The new word, a speech slip, is usually not a "real" word, and is
a result of our mind's not choosing one selection over another.
The sentence will go through a syntax process, ensuring correct
grammar, but the meaning may be confused or exactly opposite the
intended meaning. If the sentence allows for the meaning to be
taken in more than one way, then the sentence is called a
"double-entendre." If a similar-sounding word is chosen over an
intended word for use in a sentence, and the sentence takes on a
new meaning, then the word chosen is called a "paronomasia" or
"pun."[3,6,7] One of my friends was quick to point out that "puns"
are almost always intentional.

Slips of speech, whether intended or not, are often
embarrassing. It is consoling to know that slips of speech do
have redeeming uses. Slips of the tongue, word distortions,
puns, and other slips of speech reveal hidden or repressed
subjects of thought by the nature of each slip and the words
chosen. It is possible for a therapist to use an understanding
of this process to treat various mental and speech disorders, by
"observing" the subconscious stream of thought.[1] If, for
example, we feel something is bothering us, an unexpected slip of

speech can help us figure out what it may be. But psychology is
not the only beneficiary of this window to the mind. By
analyzing the data collected in speech experiments, computer
engineers have found a valuable tool for developing the next
(5th) generation computer.[5,7,8,9,10]

Perhaps the most promising application of speech slips is in
computer engineering. Computer engineers are attempting to build
machines capable of making rational decisions. A machine with
this ability would be said to possess "Artificial Intelligence"
(AI). One of the most elusive areas of human intelligence is
that of speech. When we speak, we are able to process more than
one memory unit at a time, in order to generate the building
blocks for sentences. This ability to do more than one thing at
a time is called "parallel processing." Most of today's
computers are limited to processing things serially, or, one
thing at a time. The key to AI seems to be parallel processing,
and where else better to derive an understanding of this
technique than from the human mind. Slips of speech offer a
glimpse of the processing that goes on inside the human mind.
Last night I experienced a good example of how this processing
occurs. As I peered into the refrigerator, I noticed a box on
the bottom shelf with the "Kentucky Fried Chicken" logo printed
on the top and sides. I noticed a bag on the next shelf up,
which at first glance I thought had the word "grease" printed on
it. The word that was really printed on the bag, was "meat." I
reasoned that my subconscious was saying that "Kentucky Fried
Chicken" is greasy meat, by way of a "clang". Clangs are words
that have a similar sound.[5] "Meat" and "greasy" have a common

sound, long "e". Even though I did not make an utterance, I went through the same mental process as if I were going to make a verbal statement to someone, pertaining to what I was finding in the refrigerator. Examples similar to this are being evaluated by researchers in the field of AI in order to aid the formulation of a parallel processing model. Further discussion of 5th generation computers is beyond the scope of this paper.[2,7,8,9,10,12]

Computers, as they are developed, revolutionize the way we live. We find computers in our microwave ovens, televisions, and telephones. Personal computers can be used to access libraries and other sources of data, in order to obtain any needed information. On the horizon, we find automobiles with an on-dash navigation database (a database is a collection of data, this one utilizing a compact disc player and an FM receiver), which will provide road maps for the entire country for instant (and automatic) access. Think of it, if we get lost, the car can tell us where we are. Future homes may have automatic security and environmental control. The applications are limited only by our imaginations. The development is limited only by research, some of which involves slips of speech. By this logic, we can see that slips of speech are helping to fuel the computer revolution.

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David Hartman, co-ancher of "Good Morning, America," ...
    "We'll be right back after this word from General
    Fools".[4]

Harry von Zell, when announcing the winner of the 1928
    Presidential election ... "Ladies and Gentlemen, the
    President of the United States - Hoobert Heevert!"[4]

Ed Sullivan, closing his show after a public service
    announcement about tuberculosis ... "Good night,
    everyone, and help stamp out T.V."[4]

Richard M. Nixon, acknowledging an introduction by Governor
    Dan Evans, during the watergate investigations ...
    "Thank you Governor Evidence"[4].

Governor John Connally, when discussing Spiro Agnew's legal
    problems ... "I hope that Spiro Agnew will be completely
    exonerated and found guilty of all charges against him.[4]

William A. Spooner, dean of New College Oxford, for whom the
    term "spoonerism" is named ... often used the term
    "queer old dean" in place of "dear old queen".[4]

A BBC anouncer, worried about pronouncing the name
    Rimsky-Korsakov ... "And now a short piece by (pause)
    Rimsky-Korsakov (relief). It is 'The Bum of the
    Flightle Bee'."[1]